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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,203	12/18/2001	Jae Deug Jang	P67428US0	7975
43569 7	7590 12/13/2005	EXAMINER		
	OWN, ROWE & MA	JAGANNATHAN, MELANIE		
1909 K STREI WASHINGTO	ET, N.W. N. DC 20006	ART UNIT	PAPER NUMBER	
	· ,		2666	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No	).	Applicant(s)				
Office Action Summary		10/020,203		JANG ET AL.				
		Examiner		Art Unit				
			acthon	2666				
The MAILING DATE of this con		Melanie Jagani ers on the cover						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timety filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) Responsive to communication	Responsive to communication(s) filed on <u>18 December 2001</u> .							
2a) ☐ This action is FINAL.								
3) Since this application is in cond	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
	○ Claim(s) <u>1-9</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
•	S) Claim(s) is/are allowed.							
6) Claim(s) <u>1.2 and 8</u> is/are reject								
7)⊠ Claim(s) <u>3-7 and 9</u> is/are object 8)  Claim(s) are subject to		election requir	ement.					
8) Claim(s) are subject to								
Application Papers				•				
9)⊠ The specification is objected to	by the Examiner.							
10)⊠ The drawing(s) filed on <u>18 December 2001</u> is/are: a) accepted or b)⊠ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
11) The ball of declaration is object	cted to by the Exam	11111101. 1 <b>40</b> 10 ti	io allaonoa o mos					
Priority under 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)⊠ All b)□ Some * c)□ None of:								
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>								
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)  1) Notice of References Cited (PTO-892)		4) [						
2) Notice of Draftsperson's Patent Drawing Re 3) Information Disclosure Statement(s) (PTO- Paper No(s)/Mail Date	ate Patent Application (PTO-152)							

Art Unit: 2666

#### **DETAILED ACTION**

#### **Drawings**

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2666

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the radio network controllers" in lines 11 and 12.

There is insufficient antecedent basis for this limitation in the claim.

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2666

5. Claims 1-2, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al US 6,950,412 in view of Riihinen et al. US 6,944,462.

Regarding claim 1, 8, the claimed radio network controller in an IMT-2000 asynchronous system is disclosed by base station controller (Figure 2, element 200) in IMT-2000 system. The claimed node-B matching radio access system for accessing to node-B is disclosed by plurality of base transceiver stations (Figure 2, elements 100). The claimed ATM switch accessed for providing a path for communicating traffics and control data in radio network controller, switching ATM cells, providing a path for transmitting various traffic between radio network controllers is disclosed by local router in BSC (Figure 2, element 200) with ATM switch (Figure 3, element 234f). See column 4, lines 36-53.

The claimed network matching radio access system for accessing to ATM switching and core network is disclosed by local router (element 200, 600). See column 4, lines 10-15. The claimed network synchronization system for generating and providing clocks needed for radio network controller is disclosed by clock generator provides standard time and reference signals in IMT-2000 system for base station controller. See column 4, lines 4-6, column 7, lines 21-34. The claimed radio network controller controlling system for performing call processing and network signal accessing by controlling the ATM switch is disclosed by base station management (Figure 2, element 500) which manages system with management and maintenance of base station controller (element 200). The claimed radio access network operation and maintenance system for operating and maintaining Node-B and radio network controller

Art Unit: 2666

through Ethernet path and ATM switch path is disclosed by local router with OAM control processor (Figure 3, element 231) connected to ATM and ATM I/O and Ethernet paths (Figure 2, E3/T3 links). See column 4, lines 48-53.

Lee et al. discloses all of the limitations except for radio network controller with ATM switch providing soft handover between radio network controllers. Riihinen et al. discloses a UMTS with a handover selection function (Figure 2, element 200) which makes a selection regarding which of plural connections handled by the radio access network should have control moved from one RNC to another to alleviate congestion. At the time the invention was made it would have been obvious to modify Lee et al. with handover selection function of Riihinen et al. One of ordinary skill in the art would be motivated to do so to control node handovers of a radio access network by invoking various load considerations. See column 3, lines 60-63.

Regarding claim 2, the claimed Node-B and Node-B matching radio access system are connected to each other through an E1 interface which performs a radio traffic access function is disclosed by local router and BTS connected by E1/T1 lines. See Figure 2.

### Allowable Subject Matter

6. Claims 3-7, 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2666

Regarding claim 3, prior art of record does not disclose, in single or in combination, Node-B matching radio access system performing functions of converting/inverse converting ATM adaptation layer type, converting virtual path/virtual channel and detecting abnormality in a physical link layer in combination with limitations of base claim.

Regarding claim 4, prior art of record does not disclose, in single or in combination, network matching radio access system performing functions of converting/inverse converting ATM adaptation layer type, converting virtual path/virtual channel and detecting abnormality in a physical link layer in combination with limitations of base claim.

Regarding claim 5, prior art of record does not disclose, in single or in combination, traffic processing radio access system performs a function of power control, handover and a LVDS interface, processing voice and image traffic received and transmitted between user equipment and core network in combination with limitations of base claim.

Regarding claim 6, prior art of record does not disclose, in single or in combination, network synchronization system performs a function receiving and distributing time of date signal, synchronizing an STM-1 extraction clock received from core network into a reference clock in combination with limitations of base claim.

Regarding claim 7, prior art of record does not disclose, in single or in combination, radio network controller controlling system hardware alarm collection

Art Unit: 2666

device, collecting system failure information of system in radio network controller and collecting hardware alarm information in combination with limitations of base claim.

Regarding claim 9, prior art of record does not disclose, in single or in combination, radio access network operation and maintenance system performs the function of maintaining system loading configuration, statistics, state and system error and operator matching in combination with limitations of base claim.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to 7. applicant's disclosure.

Eng et al. US 5,623,495.

Jeong et al. US 6,879,569.

Petersen US 6,574,221.

Lim US 6,876,634.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ (70 12/9/2005